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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Fredrick Michael Vernon

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WASHINGTON, DC 20005

EXAMINER

GRAHAM, CHANTEL LORAN

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,192	Applicant(s) VERNON, FREDRICK MICHAEL	
	Examiner CHANTEL GRAHAM	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,10,11 and 14-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,10,11 and 14-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed 6/18/2009 has been entered and fully considered.
2. The rejection under 35 USC § 112 is withdrawn in light of Applicant's amendments.
3. The rejection under 35 USC § 102 is withdrawn in light of Applicant's amendments; therefore Applicant's arguments are moot.
4. Claims 2, 6, 8, 9, 12, and 13 have been cancelled.
5. Claims 1, 3, and 7 have been amended.
6. Claims 15-19 are new and fully supported by the specification.
7. Claims 1, 3, 4, 5, 7, 10, 11, and 14-19 are pending and have been fully considered.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
10. Claims 1, 3-5, 7, 10-11 and 14-19 are rejected under 35 USC 103 (a) as being obvious over SIPPEL ET AL. (US PATENT 3795556), in view of VAN GILDER ET AL. (US PATENT

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2771458) and as evidence by “COMMERICAL KEROSENE” NOV 1998 and RAM ET AL. (INTRINSIC VISCOSITY OF POLYMER SOLUTIONS) . Hereby referred to as SIPPEL, VAN GILDER, “COMMERICAL KEROSENE” and RAM.

Regarding claims 1, 4-5, 7 and 10-11:

SIPPEL teaches the composition and method of a gelled (**thickening**) incendiary that comprises liquid hydrocarbon (**liquid hydrocarbons**) fuels such as JP-4 and JP-5 and mixtures thereof (**paraffin and kerosene**); and gelling agents such as polyisobutylene (**medium to high molecular weight polymer**) (**branched chain alkene**) (col. 2 lines 5-27; and EXAMPLES I-X; see also claim 1).

SIPPEL is silent to the properties relating to the claimed flashpoint of kerosene and molecular weight of polyisobutylene; however these properties are inherently taught by “COMMERICAL KEROSENE” and RAM. These references establishes that the claimed properties of kerosene can have a flashpoint in the range of 37-65 degrees C (see pg 2 physical properties of “COMMERICAL KEROSENE”) and polyisobutylene can have a range of molecular weights of 1.1×10^6 to 6.6×10^6 (pg 60, paragraph EXPERIMENTAL of RAM).

The primary reference teaches a composition that contains the claimed components, with the exception of the claimed properties. The claimed specific properties of the kerosene having a flash point greater than or equal to 62 degree C and that the polymer has a molecular weight in the range of 1.4×10^6 to 2.0×10^6 are known in the art and are clearly shown by the secondary references and therefore the use thereof is well within the level of ordinary skill in the art because the primary reference implies that any JP-5, which is known to be kerosene, can be used and polyisobutylene is used as the gelling agent (col. 2 ln 10-20).

In other words, the use of any kerosene and polyisobutylene is obvious to the skilled artisan, as shown by the secondary references.

The examiner acknowledges that the secondary references are not related to the subject matter of the primary reference but the examiner has only used these references to establish that the claimed properties of kerosene can have a flashpoint in the range of 37-65 degrees C (see pg 2 physical properties of “COMMERICAL KEROSENE”) and polyisobutylene can have a range of molecular weights of 1.1×10^6 to 6.6×10^6 (pg 60, paragraph EXPERIMENTAL of RAM); such properties are known in the art. In addition, “products of identical compound can not have mutually exclusive properties.” A compound and its properties are inseparable. Therefore, if the prior art teaches the identical compound, the properties applicant discloses and/or claims are necessarily present. See *In re Papesch*, 315 F.2d 381, 391, 137 USPQ 43, 51 (CCPA 1963) (“From the standpoint of patent law, a compound and all its properties are inseparable.”).

Regarding claims 3 and 15:

SIPPEL does not explicitly teach that the kerosene has a concentration of 90 to <100% by weight and the polymer has a concentration of up to 5% by weight; however VAN GILDER does. VAN GILDER discloses solutions of rubbery polymers (**polymer in solid form**) of high molecular weight and to the production of these solutions which are homogenous and lump free; in which the polymer may be present in solution less than or more than 1% (col. 1 ln 15-25). VAN GILDER also discloses that the polymer may be dissolved in wax (**paraffin**) prior to being diluted in lubricating oils (**paraffin polyolefin polymers**) (col. 2 ln 59-68). VAN GILDER discloses the use of any liquid hydrocarbon fuel can be used instead of lubricating oils (col. 3 ln 36-50), such as kerosene (col. 3 ln 42);

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and the use of any rubbery polymer such as polyisobutylene (col. 3 ln 47). The solutions produced are useful for many purposes such as adhesives, impregnating materials, dipping or spreading cements, binders when mixed with wood floor, cork, etc. They are also useful as waterproofing materials, coating compositions, and the like **(use as a barbecue lighting fuel)** (col. 3 ln 57-61). However, applicant is reminded that intended use has been continuously held not to be germane to determining the patentability of a composition claim (see MPEP 2111.02).

Although VAN GILDER does not specifically teach the concentration of the kerosene, this reference does in fact teach the concentration of polymer present in solution (see disclosure above) and it is the examiners position that the concentration of polymer being less than or greater than 1% would purport that the concentration of the kerosene would be less than 100% and burden is upon applicants to show evidence otherwise, thereby meeting the claimed limitations of claims 3 and 15. In view of this data, the examiner's position is that the ranges overlap or encompass the claimed ranges. "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

Having the prior art references before the inventors at the time the invention was made it would have been obvious for a skilled artisan to modify the process and composition of SIPPEL by incorporating the process and composition of VAN GILDER by using kerosene as the dilute or liquid hydrocarbon of the polymer and paraffin blend if so desired, the motivation to do so as disclosed in VAN GILDER that it would be obvious to make such modifications because any liquid hydrocarbon fuel and rubbery polymer may be used in composition if so desired. Although the property of barbecue lighting fuel is not

disclosed in SIPPEL and VAN GILDER, these solutions generally impart more than one property or function to the composition as taught in VAN GILDER. It has been held that obviousness is not rebutted by merely recognizing additional advantages or latent properties present in the prior art composition. Further, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd.Pat. App. & Inter. 1985).

Regarding claims 16-19:

Modified SIPPEL teaches gelling agents such as polyisobutylene (**polyolefin polymer**) are used in the composition (**medium to high molecular weight polymer**) (**branched chain alkene**) (refer to rejection above).

Response to Arguments

11. Applicant's arguments, see pg 6 ln 10-21, pg 7 ln 19—pg 8 ln 1-2, ln 5-20, filed 6/18/2009, with respect to the rejection(s) of claim(s) 1-14 under 35 USC 102 (b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of VAN GILDER ET AL. (US PATENT 2771458). Currently amended claims 1 and 3 necessitated the new ground(s) of rejections. Claim 1 was not presented with the current combination as amended, as well as dependent claim 3 was amended to recite a new claim limitation, which is fully supported by the specification of "...the kerosene concentration of 90 to <100% by weight and the polymer has a concentration of up to 5% by weight..."

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHANTEL GRAHAM whose telephone number is (571)270-5563. The examiner can normally be reached on M-Th 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Marcheschi can be reached on 571-272-1374. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like

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assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHANTEL GRAHAM/
Examiner, Art Unit 1797

/Ellen M McAvoy/
Primary Examiner, Art Unit 1797